Proper Planting and Care of a New Tree

Purchasing a tree is a lifelong investment. How well this investment grows depends on the type of tree selected and the planting location, the care provided during planting, and the follow-up care after planting.

When to Plant

Ideally, trees are planted in the dormant season-in the fall after leaf drop or in early spring before budbreak. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. Healthy balled and burlapped or container trees, however, can be planted throughout the growing season if given appropriate care. In tropical and subtropical climates where trees grow year round, any time is a good time to plant a tree, provided that sufficient water is available.

Planting Stress

Balled and burlap trees lose a significant portion of their root system when dug at the nursery. As a result, trees commonly exhibit what is known as "transplant shock." Transplant shock is a state of slowed growth and reduced vitality following transplanting. Container trees may also experience transplant shock, particularly if they have circling or kinked roots that must be cut. Proper site preparation, careful handling to prevent further root damage, and good follow-up care reduces transplant shock and promotes faster recovery.

Carefully follow the nine simple steps below to help your tree establish quickly in its new location. Note: Before you begin planting your tree, be sure you have located all underground utilities prior to digging.

1. Identify the trunk flare.

The trunk flare (or root flare) is where the trunk expands at the base of the tree. This point should be partially visible after the tree has been planted. Remove excess soil from the top of the root ball prior to planting if the root flare is not visible.

2. Dig a shallow, broad planting hole.

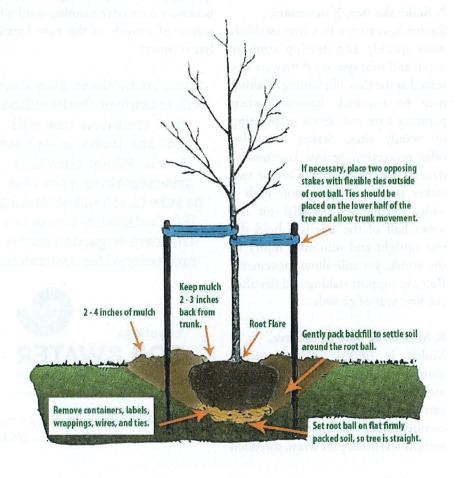
Holes should be 2 to 3 times wider than the root ball, but only as deep as the root ball. Digging a broad planting pit breaks up the surrounding soil and provides newly emerging tree roots room to expand.

3. Remove the containers or cut away the wire basket.

Inspect container root balls for circling roots. Straighten, cut or remove them. Expose the trunk flare, if necessary.

4. Place the tree at the proper height.

Take care to dig the hole to the proper depth-and no more. The majority of a tree's roots develop in the top 12 inches of soil. If the tree is planted too deep, new roots will have difficulty developing because of a lack of oxygen. In poorly drained or heavily clayed soils, trees can be



planted with the base of the trunk flare 2 to 3 inches above grade. When placing the tree in the hole, lift by the root ball, not the trunk.

5. Straighten the tree in the hole.

Before backfilling, have someone view the tree from several directions to confirm it is straight. Once planted, it is difficult to reposition the tree.

6. Fill the hole gently, but firmly.

Pack soil around the base of the root ball to stabilize it. If the root ball is wrapped, carefully remove any fabric, plastic, string, and/or wire from around the root ball to prevent girdling and to facilitate root growth. Fill the remainder of the hole, firmly packing the soil to eliminate air pockets that may dry out roots. Further reduce air pockets by watering periodically while backfilling. Avoid fertilization at the time of planting.

7. Stake the tree, if necessary.

Studies have shown that trees establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting. Staking may be required, however, when planting bare root stock or planting on windy sites. Stakes may also offer protection against lawnmower damage and vandalism. One or two stakes used in conjunction with a wide, flexible tie material on the lower half of the tree will hold the tree upright and minimize injury to the trunk, yet still allow movement. Remove support staking and ties after the first year of growth.

8. Mulch the base of the tree.

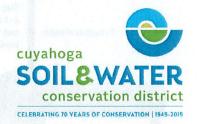
Mulch is organic matter spread around the base of the tree to hold moisture, moderate soil temperature extremes and reduce grass and weed competition. Common mulches include leaf litter, pine straw, shredded bark, peat moss, or composted wood chips. A 2 to 4 inch layer is ideal. More than 4 inches may cause a problem with oxygen and moisture levels. Piling mulch right up against the trunk of a tree may cause decay of the living bark. A mulch-free area, 1 to 2 inches wide at the base of the tree, reduces moist bark conditions and prevents decay.

9. Provide follow-up care

Keep the soil moist, but not over water-logged. Water trees at least once a week and more frequently during hot, windy weather. When the soil is dry below the surface of the mulch, it is time to water. If you have planted in the spring, continue watering until midfall, tapering off as lower temperatures require less-frequent watering.

Other follow-up care may include minor pruning of branches damaged during the planting process. Prune sparingly after planting and delay necessary corrective pruning until a full season of growth in the new location has occurred.

Completing these nine steps will maximize the likelihood that your new tree will grow and thrive in its new home. When questions arise regarding your tree, be sure to consult your local ISA Certified Arborist or a tree care or garden center professional for assistance.





Watering a properly mulched tree.

Note the mulch does not touch the tree.



This volcano mulching madness has to stop.

Just say no to volcano!



Remove any fabric, plastic, string, andlor wire from around the root ball to prevent girdling and to facilitate root growth

3311 Perkins Ave. Suite 100 Cleveland, OH 44114 www.cuyahogaswcd.org 216.524.6580

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